that of the knife must be larger in the instrument for extirpation of the tonsils, than in that for truncation of the uvula.

The instrument employed by Dr. Physick, was made by Mr. Henry Shively, No. 75, Chesnut street.

ART. III. *Observations on some points of Pathology.* By WILLIAM E. HORNER, M. D. Adjunct Professor of Anatomy in the University of Pennsylvania.

A FINE injecting matter may be pushed into any vessels into which red particles of blood can naturally penetrate. I have repeatedly filled the whole venous system from the arterial, so as to display all the fine venous meshes under the skin, and to infiltrate the body completely. Judging from these experiments, I am disposed to think that some of the phenomena of inflammation arise mechanically, and that the substance effused from vessels is in a measure according to the mass and momentum of blood flowing through them. Thus when irritation determines an increased afflux of blood to a part, if the calibres of vessels are not large enough to permit it to pass freely from the arteries into the veins, serous infiltration first of all occurs: if the afflux be augmented, then coagulating lymph, the particles of which are larger, is effused; and if there be a further augmentation of afflux, the red particles of blood are then effused through the lateral porosities of the vessels. The corresponding phenomena in fine injections, are, first the water, then the size, and lastly the colouring matter, from its particles being the coarsest of the mixture.

Though many dropsical effusions may be traced to irritation, yet I am disposed to think that some very great errors have been incorporated with their pathology, from the desire to adapt all the phenomena to one standard, to wit, inflammation. This at least I know, that in fine injections of whole adult dropsical subjects, no resistance scarcely is offered by the blood-vessels, and that the injected fluid escapes from them by their lateral parietes or porosities, as fast as it can be thrown in; manifesting thereby evidently a great laxity in their texture. This escape is generally in the order in which we see dropsies to occur, first in the ankles and feet, then up the lower extremities to the trunk; in the hands and wrist, and then up the pectoral extremities to the thorax.

The purpura urticans which occurs in the skin in dropsy, seems to be an extravasation of blood arising from the same passive or loose

texture of the blood-vessels. I have repeatedly seen the same sort of ecchymosis in the muscles of dropsical subjects, and in the interstices between them.

Pathologists have said much on the distinction between venous and arterial capillary hæmorrhage; I doubt very much the practicability of making out either case very clearly and distinctly from the other, yet they have rather unsoundly drawn the inference, that spontaneous bleeding from the venous system is passive, while that from the arteries is active. Judging from mechanical arrangement, I am inclined to think that all hæmorrhage not arising from violence or mechanical injury comes from the arteries; inasmuch as microscopical observation teaches us that the blood in getting into the extreme arteries is there confined to the smallest sanguiferous channels, and it is of course there that rupture is most likely to occur, for so soon as the blood reaches the veins the channels are larger, more dilatable, and therefore, less liable to be broken. Genuine venous hæmorrhage, is probably most frequently the result of obstruction to a large venous trunk, either by pressure on it, or by something similar; thus we see in women during pregnancy bloody spots of ecchymosis on the legs from ruptured veins; and in persons with varicose ulcers, frequent bleeding from the latter, when the erect position puts too great a column of blood upon them.

Red blood is excreted from the pleura in its severe inflammations, and judging from what I have observed, the order of the effusion is first serum, then coagulating lymph, and then red particles of blood, all of which may, as in inflammation of other textures be indicative of the gradual dilatation of the blood-vessels. The most remarkable instance of this successive secretion, excretion, or effusion, whatever it may be called, that I have met with, occurred the last winter in our dissecting rooms; in this case the marks of inflammation were all recent, and had supervened upon a tuberculous phthisis of both lungs. When inflammation occurs in the pulmonary tissue itself, it is always marked by an accumulation of red blood in their structure, giving them a red purple colour, (Bichat, Anat. Gen. Vol. 2d. p. 62.) by their increased weight, diminished elasticity, and by their being much more watery than usual, probably from the serum being separated from the red blood after death. There is also a considerable quantity of frothy mucus in the bronchia. This state of the lung is most frequently attended with a recent effusion of coagulating lymph on the pleura, and by a bloody serum in the thorax. It is, however, to be observed, that bloody serum being found in the cavity of the pleura is not an absolute proof of its being secreted or dis-

charged in that state, because if the examination be much postponed after death, the serum effused may be tinged by the lung soaking in it.

It is owing to the blood-vessels of the lungs being so superficial, that as in the intestines, their inflammations pass off either by an increase of their natural secretion of mucus, or by the effusion of serum and of blood. Laennec has said, (vol. i. p. 116,) that a collection of pus in the pulmonary tissue in consequence of inflammation, is one of the rarest of cases, at least it is one hundred times more rare than a vomica from tuberculous matter, and a thousand times more so than empyema. In all the dissections of lungs that I have made, I have met with it but once, and that lately, (June 29th, 1827,) at the Alms-house, in which case the surrounding part of the lung was gangrenous.

Art. IV. *Clinical Reports of Cases treated in the Infirmary of the Alms-House of the City and County of Philadelphia.* By Samuel Jackson, M. D. one of the attending physicians.

In the preceding number of this Journal, a continuation of clinical reports of cases occurring in the Alms-House Infirmary was promised. Those now reported are some of the most interesting that came under my notice, during the term of my duty in August, September, and October last. The history of the diseases, is chiefly taken from the case-book, in which the student of the ward, copies from his note and prescription book, the daily observations on each case and the treatment directed. The autopsical histories are principally from my own notes, and in some instances, I have supplied from the same source omissions in the history of the cases as kept by the students; and have corrected some few inaccuracies, none of them, however, are of material importance. I have to regret that several of the cases of highest interest, in consequence of the severe and protracted illness of Messrs. Ashmead, Bettner, and Horner, who were successively taken down with fever, contracted through fatigue, and probably from exposure to putrid miasm in repeated dissections, and the foul air of some of the wards that were over-crowded with patients, were kept in too imperfect a manner to be recorded.

An unusual number of fever patients entered the infirmary during my period of attendance. In August and September, most of the cases occurred in newly-arrived Irish emigrants. They were generally